

Colon Diseases

- Cancer
- Diverticular disease / diverticulitis
- Ulcerative Colitis
- Chrohns disease
- Polyps
- Trauma
- Volvulus

Open Colon Surgery

- Abdominal Incision 6-10 inches
- Wound edges held apart to allow access to abdominal contents.
- Portion of diseased colon mobilized and resected
- After operation completed abdominal wound is closed with sutures

Laparoscopic Colon Surgery

- Abdomen insufflated with CO2 gas to create working space
- Trocars placed to allow camera and instrument insertion into the abdomen
- Operation performed by viewing on video monitor
- Diseased colon mobilized and removed through small abdominal incision
- After operation completed small incisions closed with suture
- See video / pictures

Open v. Lap Colectomy Video

DSL06-1457.3

 ETHICON ENDO-SURGERY, INC.
a Johnson & Johnson company

Open Colon / Video

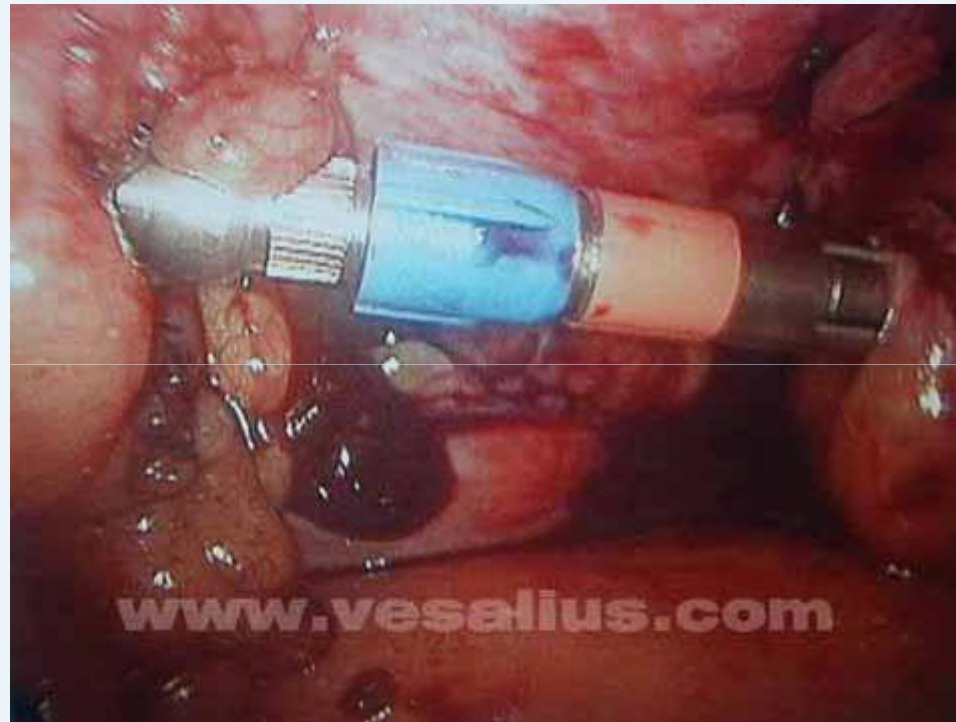
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Lap Colon Set Up



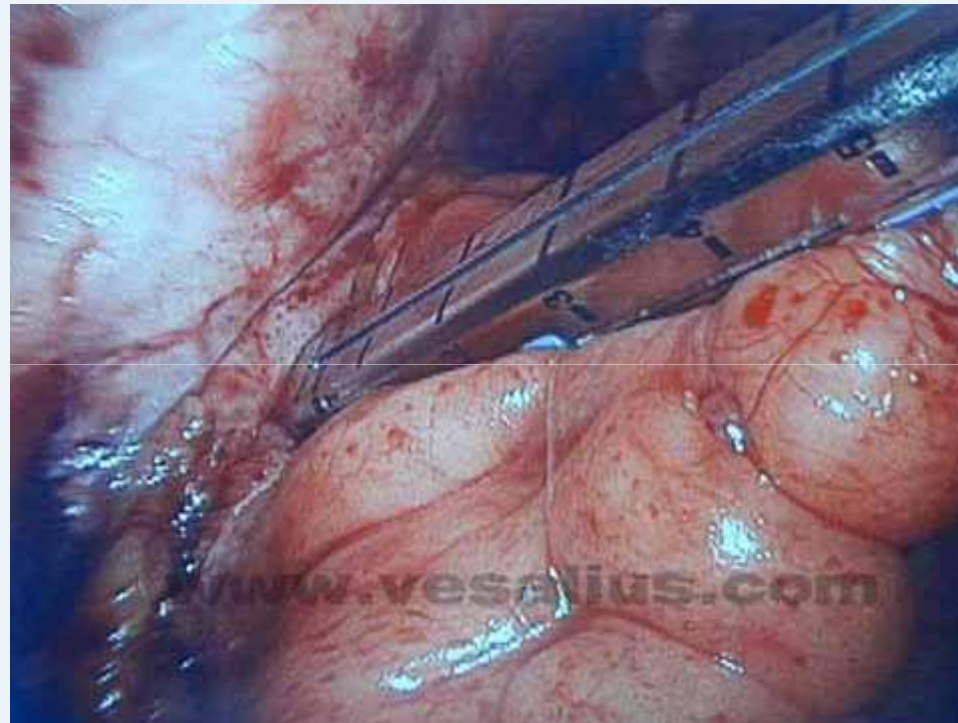
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Anastomosis



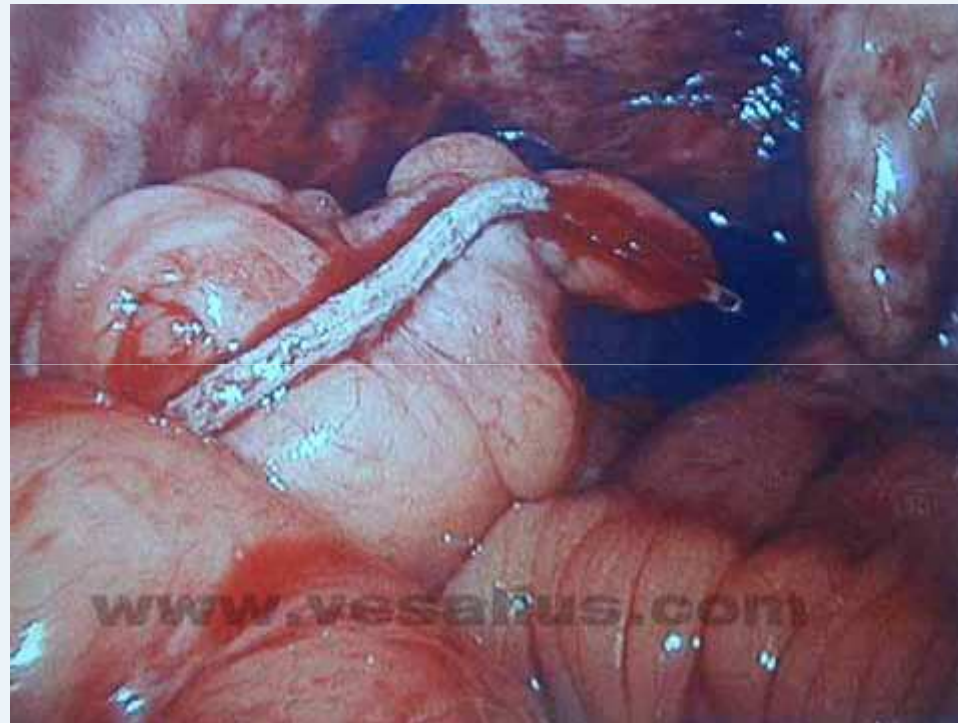
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Stapler on Colon



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Stapled Colon



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Heralding the Comparisons of Minimally Invasive and Open Colon Surgery

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Referring Physicians Already Know

- Minimally invasive colon surgery is a patient-friendly option with meaningful advantages
 - ▶ Less scarring
 - ▶ Less pain
 - ▶ Less recovery time

Referring Physicians Need To Know

- Numerous advantages of minimally invasive surgery (MIS) for colon cancer
 - ▶ Equal oncological clearance to open colectomy
 - ▶ Fewer complications of wound infection, anastomotic leak, etc
 - ▶ Greater range of patients than previously thought
 - ▶ Patient-friendly (shorter hospital stay, less pain, etc)

Key Findings

- Efficacy comparisons via

- ▶ COST Trial –

- At 3 years, rates of recurrence were similar: 16% MIS and 18% open ($P=.32$, 95% CI)
- Recurrence rates in surgical wounds were less than 1% in both ($P=.50$, 95% CI)
- At 3 years, overall survival rates was similar in both groups: 86% MIS and 85% open ($P=.51$, 95% CI)

- ▶ Barcelona Trial

- MIS associated with reduced risk of tumor relapse ($P=.07$, 95% CI)
- Overall Survival - MIS associated with reduced risk of death from any cause ($P=.22$)
- Cancer Survival - MIS associated with reduced risk death from a cancer-related cause ($P=.03$)

- ▶ COLOR Trial

- Postoperative exam showed no differences between resected samples
- No difference in morbidity/mortality 28 days after colectomy according to location of resection
- Elderly patients were not excluded from trial (median age=71)
- Obesity no longer regarded as contraindication

Minimally Invasive Colorectal Resection

Outcomes: Short-term Comparison with Open Procedures: MICRO Review

- Minimally invasive colon surgery means fewer intraoperative and perioperative complications:
 - ▶ Significantly lower rates of wound infection ($P<.001$)
 - ▶ Lower rates of anastomotic leak and venous thromboembolism
 - ▶ Lower rates of cardiac events
- Despite minimally invasive colon surgery requiring longer surgical time:
 - ▶ Significantly smaller incisions ($P=.001$)
 - ▶ Significantly less blood loss ($P=.001$)
 - ▶ Fewer transfusions
- Mean GI recovery times were faster for minimally invasive colon surgery than open surgery:
 - ▶ First bowel movement ($P=.001$)
 - ▶ Time to oral intake ($P=.001$)
 - ▶ Time to normal diet ($P=.001$)
- Benefits consistent across all conditions (cancer, IBD, diverticular disease)